In the matter of: ET Docket No. 03-104

I am very concerned that the establishment of BPL will result in harmful interference. As the NOI indicates the Commission has many concerns over how the possibility of interference may be assessed and mitigated.

Every FCC regulated communications service has many requirements that transmitters not emit outside of the authorized allocations to avoid damaging other users of the spectrum. Every unintentional radiator has a similar requirement that it not hurt other users, and must accept a degree of interference.

While the Commission should promote the use of new technologies and applications, the concept of not hurting others is just as valid now, if not more so, as spectrum congestion increases. It is always the minority users that need the protection of the law and regulations.

It would be unacceptable to allow a large automobile manufacturer to, for instance, exceed the maximum permitted width of vehicles on the road for a new model with the justification that he would be able to serve a lot of people with the new vehicle, and only hit a few additional oncoming cars in the process.

The Commission is well aware of studies around the world that have demonstrated the potential for interference. It doesn't take much – as a radio amateur and broadcaster I know that a one watt transmitter at these frequencies can be heard around the world under favorable conditions.

While I won't address the technical methods of assessing interference, I will say that whatever method is used to determine it, if BPL causes other users damage BPL should not be permitted.

As unintentional radiators, BPL systems are by nature unmanaged from the standpoint of interference. By this I mean that for a broadcaster, the quality of the transmitter is of serious concern as this is what the business depends on. Conversely where we have a problem with existing utility power lines causing interference with radio operations due to faulty insulators and the like, the Commission has had many lengthy problems requiring many enforcement letters. This is because the radio interference problems of a public power utility are a minor annoyance that very little attention is devoted to.

The result is that while with sufficient pressure the utilities do repair their lines, the pressure comes not from people who can't listen to their radios or television sets but from the occasional persistent and technically interested person who badgers the utility and the Commission's enforcement division, and frequently uses his own equipment to find the problem, until the repair is effected.
The same situation will occur in BPL operation except to a larger degree because, operating with unshielded wires, every one of the systems will radiate to some degree. It will be a widely distributed service, and pinpointing the source difficult to track down. At these frequencies a fraction of a watt can cause damaging interference for hundreds of miles.

We cannot expect the average citizen to determine whether interference is within acceptable limits. Nor can this person then confidently battle the BPL operator. And even if someone does, one is faced with a BPL operator such as a utility or In House system in an apartment house, where there is little or no technical

interest, and little or no management interest in this issue. What is he/she supposed to do?

The Commission has long experience with cable TV companies whose 'leaky' systems interfere with other users – some cases go on for years – and this is with a company which is where the cable is the focus of the business. With cable TV with a little effort the interference is obvious and quickly pinpointed, although not necessarily easily fixed. What would the risks be of a system where interference is generalized noise that can't be pinpointed, and that may be coming from miles away?

So the system must be designed to operate without causing interference for many years, under all kinds of physical and climactic assaults.

It is not the Commission's responsibility to figure out how to do this but hurting other users – who cannot fight back effectively - is not justifiable as the price for new technology.

Thank you for your interest.

Peter Ferrand
1506 NH Route 4A
Enfield, NH 03748
603.632.5707
WB2QLL